

October 2, 1954

Dr. Otto Schales
Director of Chemical Research
Alton Ochsner Medical Foundation
3503 Prytanis Street
New Orleans, LA/

Dear Dr. Schales:

Thank you for your interesting letter of September 27 on congenital subluxation in German Shepherds. This is not a question to which I can give you an offhand answer, as my specialty is in the genetics of other organisms, but I will give the matter my attention at the earliest convenient opportunity, during the next few weeks. I will be surprised if there is not already some informative literature; if not, I will forward your inquiry to other authorities. If the trait is fully recessive, it will not be an easy matter to eradicate it, or predict when it will come up, unless very detailed pedigrees of the ancestors and correlative lines are available. For a few genetic diseases, however, the heterozygotes can be detected, or the means of detection might be searched for.

In any event, it would be wise to collect as much pedigree information as you conveniently can. Even if a similar defect has been described before, it is not always possible to be sure of the identity of genetic etiology of two similar diseases solely on the basis of pathological evidence. If you have data on the issue of crosses between parents of which one or both is affected, these would be the most valuable. If possible, the sex of the individuals should be indicated, together with any other distinctions that might lead to the possible detection of the heterozygous "carriers" of the disease.

I can fully sympathize with the grief that such diseases can cause. It is unfortunate that in the past, breeders of animals for show were so narrow-minded in their aims in the breeding of "superior" types. Probably cats have suffered from this even more than dogs. In livestock breeding (for rather different ends, to be sure) the first necessary accomplishment was the substitution of rational, quantitative measures of performance for the artificial and unrealistic standards of the show ring.

Yours sincerely,

Joshua Lederberg
Professor of Genetics